

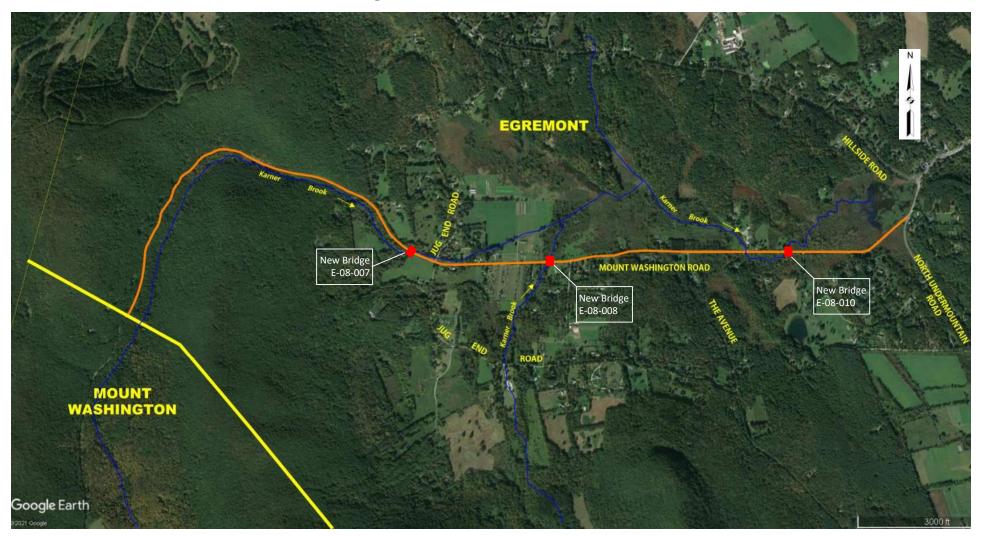


#### **Existing Conditions / Background**

- Project length 3.5 miles
  - Mount Washington Town line to Route 41
- Rural Major Collector
  - Average Daily Traffic
    - 732 vpd west of Jug End Road
    - 1274 vpd east of Jug End Road
  - 11 ft. lanes with no shoulders
  - Posted speed limit 25-40 mph
  - 1 of 4 roads to Mount Washington
    - Only access from Massachusetts
  - 1 of 6 <u>Town</u> roads eligible for the Transportation Improvement Program (TIP)



#### **Project Overview**





#### Why is the project needed?







- Poor / failing pavement
- Narrow roadway / lack of shoulders
- Poor drainage / erosion
- Safety (obsolete guardrail, steep drop offs, etc.)
- Bridges in fair to poor condition



#### This is not a maintenance job Pavement shim & overlay = \$500,000 +



The poor pavement condition has caused potholes to develop requiring constant maintenance



The weak roadway base material leads to rutting of the pavement, trapping water, ice and snow



#### This is not a maintenance job Pavement shim & overlay = \$500,000 +

#### Will not fix:

- Failing pavement / poor subbase
  - Narrow roadway
  - Poor drainage / erosion
- × Safety (guardrail, steep drop offs, etc.)
  - × Bridges







#### Design Goals

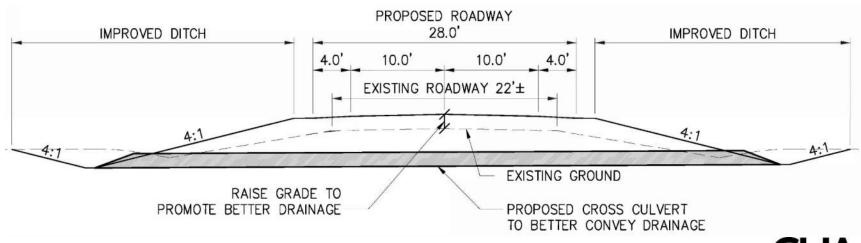
- Pavement reconstruction
- Improve safety for all users (vehicles, pedestrians, bicyclists)
- Improve drainage
- Replace existing bridges
- Satisfy environmental and Right-of-Way considerations
- Maintain sensitivity to roadway context and character



#### Drainage and Safety Improvements

- ✓ Improve ditches
- Elevate roadway where possible
- ✓ Direct runoff
- ✓ Provide shoulders 2 4 ft.

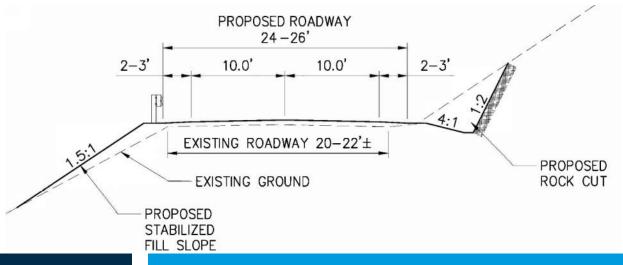




# Safety Improvements

- Install / upgrade guardrail
- Widen road
- Increase sight distance
- Reduce erosion
- Improve Drainage



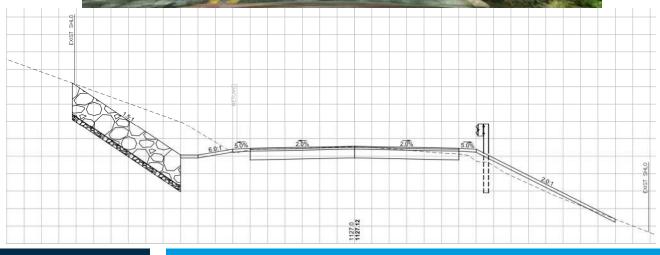




# Minimize Impacts

**Proposed Stone Slopes** 

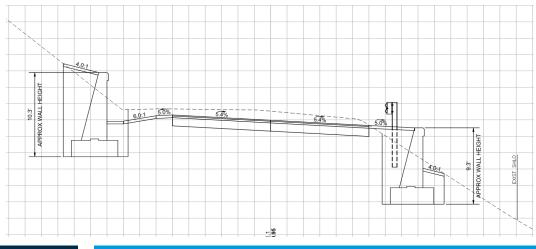




# Minimize Impacts

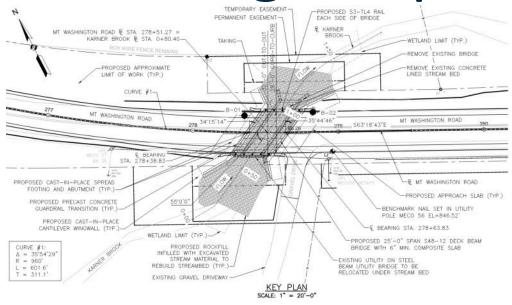
**Proposed Retaining Walls** 

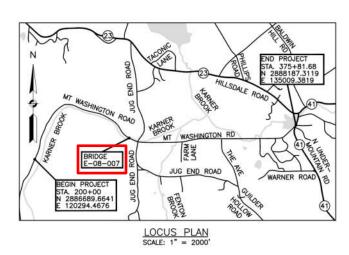


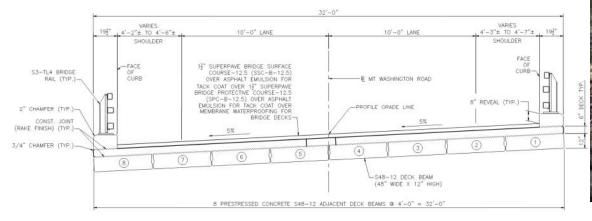




# Bridge Improvements



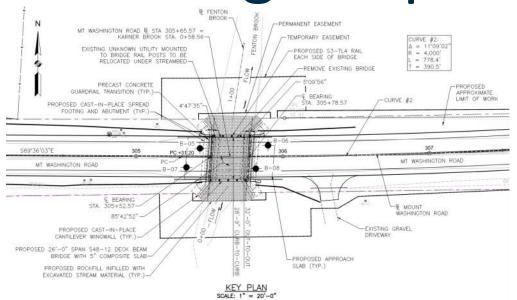


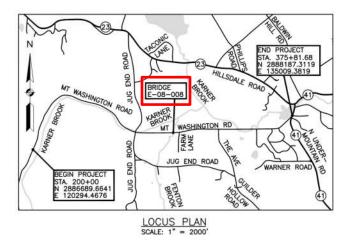


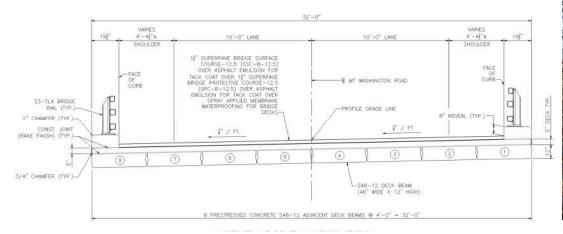




# Bridge Improvements



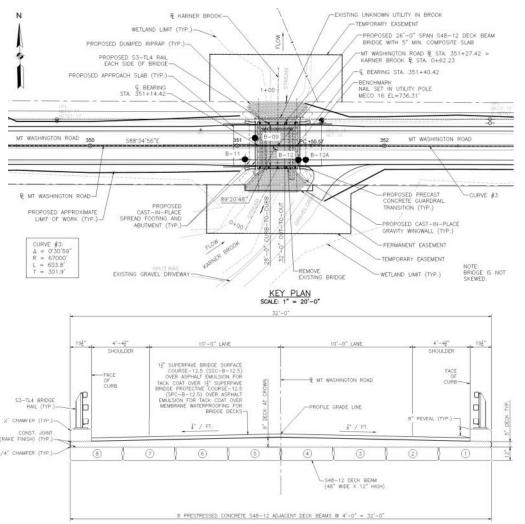


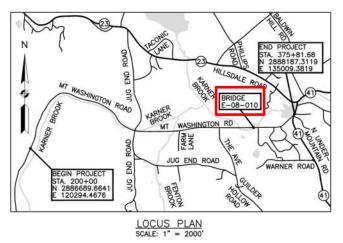






# Bridge Improvements









#### **Estimated Construction Cost**

How is this funded?



#### TRANSPORTATION IMPROVEMENT PROGRAM (T.I.P.)

- Allocates Funding from Federal & State Government to **Roadway Projects**
- List of Projects Programmed by Year (5 Year List) -2022 - 2027
- Regional Planning Organization Determine Funding Year
- Town is Responsible for Design and ROW



Leverages Town \$\$\$



MassDOT Review & Construction Administration



# TRANSPORTATION IMPROVEMENT PROGRAM (T.I.P.)

- ✓ Town submitted Project Need Form (PNF)
- ✓ Project determined eligible for TIP
- Assigned MassDOT Project number
  - **#608547**
- Needs to be programed / prioritized by MPO
- Commitment by the Town for design and ROW



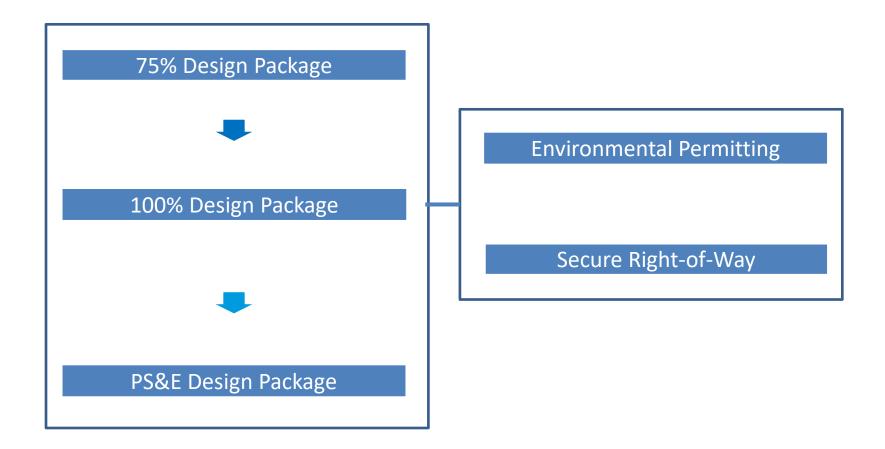
# Preliminary Design Process

Review Project Planning Report/Existing Project Data Define Project Outreach Process **Order Necessary Survey Data Conduct Geotechnical Investigations** Develop Preliminary Pavement Design **Submit Design Exception Report** Develop Preliminary Road & Bridge Plans **Develop Preliminary Cost Estimate Develop Functional Design Report** 

Submit 25% Package



#### Final Design Process





# Design Funding Schedule 25% Design Completed June-July 2021

75% Design Start Jan. / Feb. 2022





75% Design Full Appropriation

- \$325,000
- 2021 Town Meeting



#### **Questions and Comments**

